CLAIMS

WHAT IS CLAIMED IS:

Sub a1

1 1. A method for steganographically combining data, comprising the steps of:

2   acquiring first data via a data source;

3   acquiring from the data source meta-data associated with the acquired first data;

4   and

5   combining the acquired first data and the acquired meta-data into steganographic

6   data, wherein a difference between the steganographic data and the

7   acquired first data is imperceptible.

1 2. The method according to claim 1, further comprising the step of:

2   storing the steganographic data.

1 3. The method according to claim 2, wherein the steganographic data is stored in

2   memory coupled with the data source.

1 4. The method according to claim 2, wherein the steganographic data is stored at a

2   location remote from the site where the first data and meta-data are acquired.

1 5. The method according to claim 1, further comprising the step of:

2   transmitting the steganographic data to the remote location.

1 6. The method according to claim 1, wherein the step of combining produces one or

2   more steganographic data combinations.

1 7. The method according to claim 6, further comprising the step of:

2 evaluating each of the one or more steganographic data combinations to

3 determine the one combination that most closely matches the acquired

4 first data.

1 8. The method according to claim 7, further comprising the conditional step of:

2 if all of the one or more steganographic data combinations perceptibly differ from

3 the acquired data, then repeating the step of combining.

1 9. The method according to claim 1, whereby the step of acquiring meta-data is

2 substantially completed before acquiring another first data.

1 10. The method according to claim 1, wherein at least a portion of the acquired meta-

2 data is related to information received from a user.

1 11. The method according to claim 1, wherein:

2 the first data comprises an electro-optical image produced by a component of a

3 digital camera.

1 12. The method according to claim 11, wherein:

2 the meta-data relates to one or more of identification of the acquired image,

3 parameter settings of the digital camera, the environment in which the

4 image is acquired, and a spatial description of the camera.

1 13. The method according to claim 1, further comprising the step of:

2   pre-processing the meta-data by hashing the meta-data, encrypting the meta-data,

3   or encrypting the hashed meta-data.

1   14. The method according to claim 1, wherein the first data and the meta-data are

2   acquired via the data source at approximately the same time.

1   15. A device for generating steganographic data, comprising:

2   a first suite of sensors configured to acquire data;

3   a second suite of sensors configured to acquire meta-data, wherein the meta-data

4   is associated with the acquired data;

5   a steganographic engine configured to combine the acquired data and the acquired

6   meta-data to form steganographic data, wherein the steganographic data

7   differs imperceptibly from the acquired data.

1   16. The device according to claim 15, further comprising:

2   a memory configured to store the steganographic data.

1   17. The device according to claim 15, wherein the steganographic data comprises

2   one or more different steganographic data combinations obtained using different

3   combination algorithms.

1   18. The device according to claim 17, further comprising:

2   a figure-of-merit tester configured to determine one of the one or more

3   steganographic data combinations that differs the least from the acquired

4   data.

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1　　19. The device according to claim 15, wherein the second suite of sensors further

2　　　　comprise:

3　　　　a user interface configured to receive information from a user of the device.

1　　20. The device according to claim 19, wherein the user interface further comprises:

2　　　　one or more different kinds of input devices configured to interact with the user

3　　　　interface.

1　　21. The device according to claim 15, further comprising:

2　　　　a communications interface configured to transmit the steganographic data to a

3　　　　location remote from the device.

1　　22. The device according to claim 15, wherein the second suite of sensors is

2　　　　controlled to complete acquiring the meta-data before the first suite of sensors

3　　　　acquires other data.

1　　23. The device according to claim 15, wherein the meta-data comprises hashed and

2　　　　encrypted meta-data portions.

1　　24. A digital camera for steganographically combining meta-data, comprising:

2　　　　a image plane configured to acquire an electro-optical image;

3　　　　a suite of sensors configured to acquire meta-data, said meta-data is associated

4　　　　　　with the electro-optical image;

5　　　　a steganographic engine configured to combine the electro-optical image and the

6　　　　　　meta-data to form steganographic data, said steganographic data differing

7　　　　　　imperceptibly from the electro-optical image.

1   25. The digital camera according to claim 24, further comprising:

2   memory configured to store the steganographic data.

1   26. The digital camera according to claim 24, wherein the steganographic data

2   comprises one or more different steganographic data combinations obtained

3   using different combination algorithms.

1   27. The digital camera according to claim 26, further comprising:

2   a figure-of-merit tester configured to determine one of the one or more

3   steganographic data combinations that differs the least from the electro-

4   optical image.

1   28. The digital camera according to claim 24, further comprising:

2   a display area configured to display information related to the meta-data.

1   29. The digital camera according to claim 24, further comprising:

2   a display area configured to display information related to the steganographic

3   data.

1   30. The digital camera according to claim 24, wherein the suite of sensors is

2   configured to acquire meta-data related to one or more of camera angle,

3   geographical location, environmental conditions, date and time, image subject

4   identification and image parameter settings.

1   31. The digital camera according to claim 24, wherein the meta-data comprises

2   hashed and encrypted meta-data portions.